Patent Claims

1. Device to form stacks of objects (9, 9a) with
   1.1 a compartment device (1) with a plurality of compartments (5) moved along the path that each receive an object (9, 9a), whereby
   1.2 the path of movement is perpendicular to the compartment arrangement,
   1.3 a transfer device (20) to withdraw an individual object (9a) from a compartment (5) and to insert the object (9a) into an empty compartment (5) of the compartment series, and with
   1.4 an ejection device (14) to eject a series of objects (9, 9a) forming a stack.

2. Device according to claim 1, whereby the transfer device (20) is designed so that it inserts the object (9a) into another compartment (5) of the series of compartments.

3. Device according to claim 1 or 2, whereby the transfer device (20) is designed so that it moves the object (9a) without changing its orientation.

4. Device according to one of the prior claims, whereby the compartment device (1) is designed so that it moves the compartments (5) along a path having two at least approximately parallel sections, whereby the movement in these two sections runs in opposite directions.

5. Device according to one of the prior claims, whereby the compartments (5) of the compartment device are moved along a closed path with two parallel sides (2a, 2b).

6. Device according to claim 5, whereby the compartments (5) are on a revolving chain (2), belt, etc.

7. Device according to one of the prior claims with a supply device (8) that inserts the objects (9, 9a) sequentially into the compartments (5) of the compartment device.

8. Device according to one of the prior claims with a device to generate an apparent stoppage of the compartment device (1) at the site of the ejection device (14).

9. Device according to one of the prior claims, whereby the transfer device (20) has a servodrive (26) to provide movement in two directions.

10. Device according to one of the prior claims, whereby the transfer device is designed to transfer a plurality of individual objects (9a) out of and into non-neighboring compartments (5).

11. Method to form stacks of objects (9, 9a) with the following procedural steps.
    - 11.1 the objects (9, 9a) are located next to each other in compartments (5),
    - 11.2 the compartments are moved with the objects (9, 9a) along a path perpendicular to the compartment arrangement,
    - 11.3 a single object (9a) is removed from a series of adjacent objects (9, 9a), and
    - 11.4 the object is inserted into an empty compartment (5), and
    - 11.5 a series of objects (9, 9a) now forming a stack is ejected together out of the compartments (5).

12. Method according to claim 11, whereby the individual object (9a) is inserted into a different compartment (5) of the compartment series than the compartment (5) from which it was removed.

13. Method according to claim 11 or 12, whereby the object (9a) does not change its orientation while it is being removed from one compartment (5) and inserted into another compartment (5).

14. Method according to one of claims 11 to 13, whereby the compartments (5) are moved along a path having two at least approximately parallel sections, whereby the movement in these two sections runs in the opposite direction.

15. Method according to one of claims 11 to 14, whereby the compartments (5) are moved along a closed path with two parallel sides (2a, 2b).

16. Method according to one of claims 11 to 15, whereby the compartments (5) are moved with the aid of a revolving chain (2), a belt, etc.

17. Method according to one of claims 11 to 16, whereby the objects (9, 9a) are inserted sequentially into the compartments (5).

18. Method according to one of claims 11 to 17, whereby the movement of the series of compartments (5) is brought to an apparent standstill while the objects (9, 9a) are being ejected from the compartments (5).

19. Method according to one of claims 11 to 18, whereby a plurality of individual objects (9a) are simultaneously removed from compartments (5) and simultaneously inserted into compartments (5).
